

REMARKS/ARGUMENTS

Claims 16 and 17 have been amended. Claims 1-4, 11-15, and 18-21 have been canceled.

Claims 11-15 were previously rejected under 35 U.S.C Section 101 as being directed to non-statutory subject matter. Claims 1-4 were previously rejected under 35 U.S.C. Section 103 as being unpatentable over White et al. and in further view of Ratnaker, Sakamoto et al. and Shur. Claims 16-17 were previously rejected under Section 103(a) as being unpatentable over White et al. and further in view of Ratnaker, Sakamoto et al., and Carroni et al. Claims 18-21 were previously rejected under 35 U.S.C. 103(a) as being unpatentable over White et al., and further in view of Ratnaker and Conover et al.

Amendments to the Claims:

In this Amendment, Applicant has amended claims 16 and 17 and cancelled claims 1-4, 11-15, and 18-21 from further consideration in this application. Applicant is not conceding that the subject matter encompassed by claims 1-4, 11-15, and 18-21 prior to this Amendment is not patentable over the art cited by the Examiner. Claims 16 and 17 were amended and claims 1-4, 11-15, and 18-21 were cancelled in this Amendment solely to facilitate expeditious prosecution of the allowable subject matter noted by the Examiner. Applicant respectfully reserves the right to pursue claims, including the subject matter encompassed by claims 1-4, 11-15, and 18-21, as presented prior to this Amendment and additional claims in one or more continuing applications.

Examiner Interview

Telephone interview with Examiner Pearson was concluded 05/20/2008. Examiner was provided with amended claims 16 & 17 for review. Examiner agreed that amended claims would be allowable.

White et al.

Claim 16 has been rewritten and now includes a method of adding information to digital contents by inputting watermarked contents $Ce0$ and $Ce1$ along with non-watermarked original contents C . The watermarked contents and the non-watermarked contents are divided into partial contents $Ce0(n)$, $Ce1(n)$ and $C(n)$, according to a pseudo random number sequence and with the number of partial sets of each being predetermined and greater than one. The pseudo random number sequence is generated from a seed that is dependant on a specific content requestor, with the seed changing for each different requestor, and the seed furthermore varying in accordance with a certain rule. The partial contents are then selectively synthesized together to form watermarked contents Cf which includes fingerprinting information in the form of the positioning of the non-watermarked partial contents $C(n)$ throughout Cf . The amendment is supported, for example, in the abstract and in paragraphs **0055, 0066, 0067, and 0072.**

Regarding Claim 16, White et al. teaches methods of adding unique watermarks to copies of digital content. The watermark can also be used to indicate the origin and authenticity of the data or the identity of clients/users/customers of the data (paragraph 0022). The watermarks or stamps refer to any modification to one or more frames of video that result in detectable information being added to those frames (paragraph 0054). However, White et al. teaches a method in which three copies of content are used: a first copy called "a neutral copy" (paragraph 28), a second copy

corresponding to sequence of 1's (paragraph 28) and a third copy corresponding to sequence of 0's (paragraph 28). Nowhere do White et al. suggest that partial sets of non-watermarked original content C , mixed with partial sets of watermarked content $Ce0$ and $Ce1$, can be used to embed unique fingerprint information. Also, White et al. do not teach that $Ce0=C(n)-ap(n)$ and $Ce1(n)=C(n)+ap(n)$. Further, nowhere do White et al. teach generating a predetermined number of partial sets where the number is greater than one.

Ratnakar

Ratnakar teaches: a pseudo random number generator for controlling said content selector (column 5, lines 29-32 and 36-39), wherein $Ce0(n)$ and $Ce1(n)$ are responsive to the seed of the pseudo random number (column 5, lines 29-32). However, even if White et al. is combined with Ratnakar in the sense of "generating a pseudo random number sequence from a random number seed; said seed being responsive to a specific acquisition requester requesting digital content;" Ratnakar does not teach using a pseudo random number sequence where the seed varies in accordance with a certain rule. Ratnakar does not teach generating a predetermined number of partial sets where the number is greater than one.

Sakamoto et al.

Sakamoto et al. teach a watermark responsive to intensity of said digital watermark (paragraph [0218]), but they do not suggest using partial sets of non-watermarked original content C to embed fingerprint information, nor do they teach generating a predetermined number of partial sets where the number is greater than one.

Caroni et al.

Caroni et al. teach a seed being responsive to identity of the specific acquisition requestor (column 6, lines 27-33), but they do not suggest using partial sets of non-watermarked original content C to embed fingerprint information, nor do they teach generating a predetermined number of partial sets where the number is greater than one.

Therefore, the combined teachings of White et al., Ratnakar, Sakamoto et al., and Caroni et al., do not render obvious a method for adding information to digital content using a computer, the method comprising controlling and selecting as output a predetermined number of partial sets $Ce0(n)=C(n)-ap(n)$, $Ce1(n)=C(n)+ap(n)$ and $C(n)$ of contents $Ce0$, $Ce1$, and C ... according to the pseudo random number sequence, where the predetermined number is greater than one and where digital contents $Ce0$ and $Ce1$ are responsive to watermark intensity, and where the pseudo random number sequence key varies according to a certain rule; and further generating digital watermark content Cf including fingerprint information by switching and synthesizing together the partial sets $Ce0(n)$, $Ce1(n)$ and $C(n)$ according to information associated with the specific acquisition requestor, as claimed by the amended Claim 16.

Claim 17 includes all the limitations of Claim 16, as well as limitations useful when working with compressed content, such as generating pointer information to apportion and position partial sets within the digital content Cf , and storing the pointer information within Cf , without requiring unpacking of the partial sets.

CONCLUSION

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Reply to Office action of April 22, 2008

Reconsideration and withdrawal of the Office Action with respect to Claims 16 and 17 is requested. Applicants submit that the claims are now in condition for allowance or at least in better form for appeal.

In the event the examiner wishes to discuss any aspect of this response, please contact the attorney at the telephone number identified below.

☒ The Commissioner is hereby authorized to charge payment of the following fees with this communication or credit any overpayment to Deposit Account No. 09-0441:

☒ Any filing fees under 37 CFR 1.16 for the presentation of extra claims.

Respectfully submitted,

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